

In the Claims:

Please amend claims 1, 3, 8 and 9 and add new claims 12 - 22, all as shown below.

1. (Currently Amended): A computer program product including a storage medium with instructions thereon for execution by a ~~server~~ computer for automatically generating program code, the instructions comprising:

computer code for determining whether a resource is available; and

computer code for generating program code when the resource is determined to be available,

wherein generating program code includes:

computer code for creating a class file container object;

computer code for adding a method to the class file object;

computer code for adding code to the method;

computer code for generating Java byte code for the class file container  
object; and

computer code for generate an instance of the new class file object.

2. (Original): The computer program product of claim 1 wherein creating a class file container object includes:

setting attributes for a class file.

3. (Currently Amended): The computer program product of claim 2 the attributes include at least one of class file name, parent super class.

4. (Original): The computer program product of claim 1 wherein adding a method to the class file object includes:

adding a plurality of methods to the class file object.

5. (Original): The computer program product of claim 1 wherein adding code to the method includes

adding code to the method using constructs that correspond to programming language statements, expressions, and variables.

6. (Original): The computer program product of claim 5 wherein the constructs include parameters.

7. (Original): The computer program product of claim 5 wherein each statement, expression type, variable is represented as an object.

8. (Currently Amended): The computer program product of claim 1 wherein generating Java byte code for the class file container object includes:

generating an intermediate representation of program flow.

9. (Currently Amended): The computer program product of claim 8 wherein generating Java byte code for the class file container object includes:

converting the intermediate representation into byte code.

10. (Original): The computer program product of claim 1 wherein the program code implements an adaptor class.
11. (Original): The computer program product of claim 1 wherein the program code implements a proxy class.
12. (New): The computer program product of claim 1 further comprising program code for:  
repeatedly adding a method to the class file object for each method associated with a stub generated for a remote object.
13. (New): The computer program product of claim 12 wherein the program code for repeatedly adding a method to the class file object for each method associated with a stub generated for a remote object includes program code for:  
determining a number of methods associated with the stub in a remote interface.
14. (New): The computer program product of claim 12 wherein the program code for adding code to the method includes program code for:  
repeatedly adding code for each method added to the class file.
15. (New): The computer program product of claim 1 wherein at least one of the program code for adding a method to the class file and the program code for adding code to the method includes program code for:  
generating a tree of statements.

16. (New): The computer program product of claim 15 wherein the program code for generating a tree of statements includes program code for:

generating a tree representing at least one method, the at least one method comprising at least one of: a code statement, an expression, a variable and a programming construct.

17. (New): The computer program product of claim 15 wherein the program code for generating a tree of statements includes program code for:

generating a tree forming a known structure when the class file container is a known type.

18. (New): The computer program product of claim 17 wherein the program code for generating a tree forming a known structure when the class file container is a known type includes program code for:

generating a tree forming a known structure when the class file container is of at least one of an adapter and a proxy type.

19. (New): The computer program product of claim 1 wherein the program code for generating byte code for the class file container object includes program code for:

maintaining a state of a program being generated by each statement.

20. (New): The computer program product of claim 19 wherein the program code for maintaining a state of a program being generated by each statement includes program code for:

maintaining at least one of a content of a stack, a content of a variable in use during program flow.

21. (New): The computer program product of claim 20 further comprising program code for:

generating an intermediate representation of program flow based upon the at least one of a content of a stack, a content of a variable in use during program flow.

22. (New): The computer program product of claim 1 wherein the program code for determining whether a resource is available includes program code for:

determining whether a remote object having an interface to which code is being written is available.